

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017502**Date Inspected:** 03-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Mr. Yu Dong Ping/ Mr. Zhao Chao			CWI Present:	Yes	No
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No N/A
				Delayed / Cancelled:	Yes	No N/A

Bridge No: 34-0006**Component:** Tower**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Baskar Govindarajan was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Heavy Dock #Tower Trial assembly

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 06838

Ultrasonic Testing (UT)

This QA inspector performed UT of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component, 109 mtr. cross bracing gusset to Back fill plate welds. The weld designation reviewed as follows:

ESD1-FASA3- 2 B/E – Jt. nos – 28, 27, 21 –East shaft, Lift 3

WSD1-FASA3- 2 B/E – Jt. nos – 22, 28,27 –West shaft, Lift 3

This QA Inspector observed the following work in progress

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Shielded Metal Arc Welding (SMAW):

Weld joint # 15, 16 located on 109 mtr. elevation, Skin E, West shaft, Façade plate WSD1-FESA3-2D/D. Welder is identified as 040610/ 040690. ZPMC Certified welding Inspector (CWI) is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2113.

Weld joint # 15 located on 109 mtr. elevation, Skin E, East shaft, Façade plate ESD1-FESA3-2D/D. Welder is identified as 040610. ZPMC Certified welding Inspector (CWI) is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2113.

Weld joint # 16 located on 109 mtr. elevation, Skin E, West shaft, Façade plate WSD1-FESA3-2D/D. Welder is identified as 040690. ZPMC Certified welding Inspector (CWI) is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2113.

Weld joint # 13, 14 located on 99 mtr. elevation, Skin A, North shaft, Façade plate NSD1-FASA3-1 B/E. Welder is identified as 052930/ 050038. ZPMC Certified welding Inspector (CWI) is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2113.

Bay #11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 12B, located on Lift-5 Bracket SD1 – BRSA5 – 1. Welder is identified as 046769. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4b.

Weld joint # 8B, located on Lift-5 Bracket SD1 – BRSA5 – 1. Welder is identified as 041271. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4b.

Fluxcored Arc Welding (FCAW):

ORTHOTROPIC BOX GIRDER (OBG)

Weld joint # 14, 15 located on Bike Path BK005B– 004. Welder is identified as 040723/ 054460. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Weld joint # 025 located on Bike Path BK005B- 004. Welder is identified as 066764. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with

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the WPS – B – T – 2132.

Weld joint # 026 located on Bike Path BK005B- 004. Welder is identified as 067138. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Witness of Magnetic particle Testing (MT)

This QA inspector Witnessed 100% MT performed by ZPMC Quality Control personnel. The member is identified as OBG Component. The component and weld designation identified as follows:

Bike path stiffener welding

BK 005A6 -003 -075, 094

BK 005A7 -003 -099, 100

BK005A7-003-51, 53, 54

Bay #10

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 11, 12 located on Pad eye of Façade plate, ND1-SFSA3-21. Welder is identified as 053829. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112-Padeye.

Weld joint # 13, 14 located on Pad eye of Façade plate, ND1-SFSA3-21. Welder is identified as 053829. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112-Padeye.

Witness of Magnetic particle Testing (MT)

This QA inspector Witnessed 100% MT performed by ZPMC Quality Control personnel. The member is identified as OBG Component. The component and weld designation identified as follows:

Bike path stiffener welding

BK 004A7 -025 -159, 165

For further information see below pictures:-

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Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

No relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng (15921845703), who represents the Office of Structural Materials for your project.

Inspected By: Baskar, Govindarajan

Quality Assurance Inspector

Reviewed By: Clifford, William

QA Reviewer